

Pollution Prevention Pledge Program 1994 award winners

INTRODUCTION

The government of Ontario honored four companies and an association in 1994 for outstanding achievements under the Ministry of Environment and Energy's Pollution Prevention Pledge Program (P4).

At the November 1994 Environment and Energy Conference in Toronto, awards were presented to: Xerox Canada, of Mississauga; elf atchem Canada Inc., Oakville; Strataflex Canada Corporation, East York; Davlin Cleaners, Rexdale and the Hamilton District Autobody Repair Association.

AWARD CATEGORIES

The pollution prevention awards fall into two categories:

- **The Pollution Prevention Achievement Awards** -- given to companies which achieved the most outstanding results in reducing or eliminating pollutant releases, hazardous or liquid industrial waste and toxic chemicals through the use of pollution prevention methods. The awards recognize excellence in pollution prevention in small, medium-sized and large facilities.
- **The Pollution Prevention Leadership Award** -- given to the environmental group, workplace, association or company which contributed most to the promotion of pollution prevention as an environmentally safe and sound way of living and working.

SELECTION CRITERIA

The selection of candidates for awards is based on:

- the extent of reductions achieved and substances involved;
- whether the reduction involved new technology or modifications to existing technology;
- whether the achievement resulted from a team effort involving management and employees at all levels;
- whether the reduction was part of a long-term pollution prevention plan and whether reductions would be continuous;
- the extent to which reductions cut operating costs and made the company more competitive;
- whether the measures could be applied by other companies.

THE 1994 P4 ACHIEVEMENT AWARD WINNERS

P4 Large Facility Award winner: Xerox Canada Canadian Manufacturing Operations, Mississauga

This facility employs 550 people. It produces (and rebuilds) paper handling assemblies for use in company products which are exported throughout the world. Incorporated into the facility is the company's Electronics Repair Centre which services North America.

Xerox removed hazardous materials from its processes by eliminating some chemicals and substituting others with more environmentally friendly materials. Hazardous materials, such as waste solder from cleaning and resoldering of circuit boards, are collected and recycled. All ozone-depleting substances have been eliminated from the facility.

An employee education and training initiative has been implemented as part of the solvent reduction process. The program includes measures such as:

- using the right cleaner for the tasks
- closing containers immediately after use
- spraying solvent directly onto rags rather than machines
- using sturdy, reusable rags rather than weak disposables
- covering tanks with lids to prevent evaporation

The measures taken at the Mississauga plant are part of a Xerox Corporation Environmental Stewardship program. Xerox is committed to the philosophy of sustainable development and considers pollution prevention to be an integral part of sustainability. Xerox has an environmental vision: waste-free products from waste-free factories and total product stewardship for its document-processing products.

**P4 Medium-Sized Facility Award 1994 co-winner:
elf atotech Canada Inc., Oakville**

A chemical producer, elf atotech currently employs approximately 100 workers. The company manufactures and markets a wide range of chemical and lubricant products. The facility includes:

- a wet blend manufacturing area which produces acid and caustic cleaners, detergents, fabric softeners and blue jean chemicals;
- a dry blend manufacturing area which produces chemicals, including a variety of powder products, which are mainly used as caustic cleaners;
- a grease and lubricating oil facility which produces grease soap and various lubricating products.

The company is a member of the Canadian Chemical Producers' Association and is a signatory to the Responsible Care® Commitment -- a voluntary industry-based, self-regulating initiative to promote the safe production, handling and management of chemicals from raw products to end use.

elf atotech is committed to making health, safety and environmental considerations a priority in its planning and to operating in a manner that protects the environment, health and safety of its employees and the general public. A long-standing policy of the company is to counsel customers on the safe use, distribution and disposal of chemical products. It does so to ensure that off-site waste

disposal contractors are assessed before signing disposal contracts and to resolve problems created by past handling and disposal of hazardous substances.

The company has pledged to meet or exceed all statutory regulations both in practice and in spirit, and to ensure that employees are trained to handle effectively recycling materials, conserve water and energy, and minimize the environmental impact from chemical spills and emissions.

Following are some of the company's award-winning achievements recognized by the ministry:

- commitment to eliminate trichloroethane from all formulations by the end of 1994;
- assurance that lead and chlorinated additives will be eliminated from all lubricants produced and sold;
- a 40 per cent reduction of hazardous wastes by the end of 1994;
- education of customers to reduce chemical usage through the introduction of recycling equipment and other 3Rs initiatives;
- encouragement of customers to employ synthetic lubricants with extended life cycles.

Ethylene glycol and copper have been totally eliminated from the company's manufacturing processes.

Mineral spirit emissions have been reduced, as has the use of diethylene glycol and propylene glycol.

**P4 Medium-Sized Facility Award co-winner:
Strataflex Canada Corporation, East York**

Strataflex supplies flexible circuit boards to leading computer, aerospace, telecommunication and defence contractors throughout North America. Its custom-designed products have been used for diverse purposes, such as in satellites, airplanes, portable radio stations, telephones, disk drives, computers, hearing aids, ultrasound machines, gyroscopes, automobiles, missiles and airport control systems.

The company is committed to a "zero haul-away" policy and intends to treat all wastes in-house by the end of 1994. It will achieve this by:

- processing sodium persulfate and sulphuric acid wastes using a newly installed "electrowinning" system and an existing ion exchange system. Instead of copper sulphate sludge, which was previously sent to landfill, the company now generates a metallic copper residue which is removed and sold for reprocessing;

- precipitating copper chloride used in etching circuit boards, film stripper and developer solution to remove and process copper;
- processing all low-level rinses and waste water to remove copper content.

A new storage tank is being installed to capture all spills and leaks which will then be reprocessed, reducing discharges to sewers.

P4 Small Facility Award winner: Davlin Cleaners, Rexdale

Davlin Cleaners is a dry-cleaning establishment with a total of 13 employees. It is located in Rexdale and has been operating since 1988. The company specializes in suedes and leathers, wedding gowns, silks, down-filled items and delicate fabrics -- items which average dry cleaners cannot process. Because of its specialized business, the company serves clients from London in the west to Cobourg in the east. Clients include manufacturers and large retail outlets.

Since September 1993 Davlin has been cleaning 30 per cent of its volume using a water-based "New Clean and Green System". Petroleum Stoddard, a solvent, is used on the remaining 70 per cent of the load in a self-contained room with no external venting. One of the company's goals for 1994 is to convert 50 per cent of its volume to the New Clean and Green System.

By using a combination of Petroleum Stoddard and the New Clean and Green System, Davlin has been able to eliminate the use of approximately 8,500 litres of perchlorethylene a year. It has also decreased the use of Petroleum Stoddard (which generates hazardous wastes) by 50 per cent. In addition, the use of dyes has gone down by 10 per cent, other pollutants by 20 per cent and energy consumption by 30 per cent.

THE 1994 P4 LEADERSHIP AWARD WINNER

Hamilton District Autobody Repair Association (HARA)

This association has reached out to more than 300 automotive repair businesses in the Golden Horseshoe area by holding Economic Opportunity Workshops and sending out newsletters and information packages. The association has a dual message: it informs its members of the legislation

applicable to autobody shops and shows them how they can go beyond compliance to achieve greater economic and environmental gains.

Association members are taking big strides in reducing their volatile organic compounds (VOCs) -- they are recovering and reusing solvents (cleaners and paint thinners). HARA members are also reducing paint consumption by substituting high volume low pressure spray paint guns (HVLP).

Autobody shops have reduced their use of solvents by more than 80 per cent through implementing on-site solvent recycling. This has resulted in savings of \$2,000 in solvents plus another \$1,000 in spent solvent disposal costs. HARA estimates that in the region of Hamilton-Wentworth alone, between 80,000 and 90,000 litres of solvents are saved annually. The association believes a province-wide reduction of 400,000 - 500,000 litres of solvents can be achieved if its Environmental Opportunity Workshops continue to have the same impact.

POLLUTION PREVENTION ... ITS HISTORY

For the past 20 years, the government's basic operating method has been to react to crises and then try to cure the problem. In essence, reliance was on **intervention**, not **prevention**.

In 1992, to meet the challenges of the 1990s, the then Ministry of the Environment established a Pollution Prevention Office to encourage individuals, institutions and industries to make changes in their basic operations to prevent pollution before it was created.

In November 1993, the ministry unveiled the Pollution Prevention Pledge Program -- or P4.

The program challenges industry collectively to achieve a 50 per cent reduction in the release of 70 types of chemicals and hazardous wastes by the year 1995 and a 90 per cent reduction by the year 2000.

As of Oct. 13, 1994, the ministry had received 25 applicants for the P4 program -- and many are already using pollution prevention as part of their competitive business planning. The applicants were:

- Celanese Canada Incorporated (Millhaven)
- Choice Refer Systems Limited (Belleville)
- Davlin Cleaners Limited (Rexdale)
- Dow Chemical, Canada Inc - Sarnia manufacturing site
- Drew Chemical Limited (Ajax)
- elf atochem Canada Inc. (Oakville)

- Fineline Circuits Ltd. (Toronto)
- Hastech Incorporated (Guelph)
- Imperial Oil Ltd. - Finch Avenue terminal (Toronto)
- Menasco Aerospace Ltd. (Oakville)
- My Valet Dry Cleaners (North Bay)
- Novacor Chemicals Canada Ltd.
- Ontario Store Fixtures (Toronto) - (1993 Award Winner)
- Our Cleaners (Barrie)
- PCB Containment Technology Inc. (Cambridge)
- Petro-Canada Products - Lubricants centre (Oakville)
- Petro-Canada Products - Oakville refinery (Oakville)
- Petro-Canada Products - Oakville terminal (Oakville)
- Polysar Rubber Corporation (Sarnia)
- Rhone-Poulenc Specialty Chemicals Ltd. (St. Catharines)
- Stratalex Canada Corporation (Toronto)
- Sulco Chemicals Limited
- The Credit Valley Hospital (Mississauga)
- Xerox - Canadian manufacturing operations (Mississauga)
- Xerox - National Supply and Logistics centre (Mississauga)

FOR FURTHER INFORMATION:

Please contact the Pollution Prevention Office at (416) 314-7918, or the ministry's Public Information Centre at (416) 323-4321. Callers outside Toronto can reach the centre toll-free at 1-(800) 565-4923.

